GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA

UNSTARRED QUESTION NO:6967
ANSWERED ON:11.05.2000
SOLAR POWERED TRAFFIC SIGNAL LIGHTING SYSTEM
C. KUPPUSAMI

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether the Government have designed and developed Solar Powered Traffic Signal Lighting System;

(b) if so, the salient features thereof;

(c) the estimated cost of the system per unit; and

(d) the details of plans for large scale production and installation of these Solar Powered Traffic Signal Lighting system in big cities / towns all over the country?

Answer

MINISTER OF STATE FOR NON-CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE)
(SHRI M. KANNAPPAN)

(a): Two public sector undertakings, namely, Bharat Electronics Ltd. (BEL) and Central Electronics Ltd. (CEL) have designed and developed solar powered traffic signal lighting systems. BEL has installed 5 such systems in Bangalore and Hyderabad. One system installed by CEL and sponsored by the Indian Renewable Energy Development Agency (IREDA) is functioning in New Delhi. Bharat Electronics Limited have also installed a solar powered system for pedestrian crossing in Chennai.

(b): The salient features of the Solar Powered Traffic Signal Lighting System installed by CEL in New Delhi are 1.92 kWp SPV array capacity, 500 AH / 48 Volts Battery Bank, 48 V / 30 A Charge controller, 3.3 KVA inverter and other system components. The system has 60 halogen lamps each of 55 watts. The system is grid - interactive and can operate on solar power for about 3 hours per day on the average. The system developed by BEL is based on the LED technology in place of conventional lamps. The system consumes about 10 % of the power consumed by the conventional lamps and requires much less maintenance.

(c) : The cost of the system installed in New Delhi by CEL was Rs. 13.90 lakhs. The cost of the system developed by BEL for a four road junction is in the range of Rs. 7-8 lakhs.

(d): Central Electronics Limited has interacted with Delhi Police to deploy such systems all over Delhi and is pursuing the matter with other metropolitan cities in the country. Bharat Electronics Limited is also putting efforts to install such systems in Hyderabad, Chennai and Bangalore. IREDA can provide soft loans to eligible end users for installation of such systems any where in the country.